

State of California
AIR RESOURCES BOARD

Resolution 98-46

September 24, 1998

Agenda Item No.: 98-10-1

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (ARB or Board) to adopt standards, rules and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, Health and Safety Code section 43018(a) enacted by the California Clean Air Act of 1988, directs the Board to endeavor to achieve the maximum degree of emission reduction possible from vehicular and other mobile sources in order to accomplish the attainment of the state ambient air quality standards at the earliest practicable date;

WHEREAS, Health and Safety Code section 43018(c) provides that in carrying out section 43018, the Board shall adopt standards and regulations which will result in the most cost-effective combination of control measures on all classes of motor vehicles and motor vehicle fuel, including but not limited to specification of vehicular fuel composition;

WHEREAS, Health and Safety Code section 43013 authorizes the Board to adopt and implement motor vehicle fuel specifications for the control of air contaminants and sources of air pollution, which requirements the Board has found to be necessary, cost-effective, and technologically feasible to carry out the purposes of Division 26 of the Health and Safety Code;

WHEREAS on September 28, 1990, by Resolution 90-59, the Board approved the adoption of section 2257, title 13, California Code of Regulations, prohibiting the sale or distribution of motor vehicle gasoline except gasoline certified to contain adequate levels of deposit control additives;

WHEREAS, the ARB staff has administered the Deposit Control Additive Regulation for over six years and has approved more than 370 applications for certification;

WHEREAS, the staff conducted public workshops on March 24, June 11, and July 24, 1998, regarding the latest research on combustion chamber deposits and to discuss proposed amendments to the gasoline deposit control additive requirement;

WHEREAS, based on staff evaluations and industry input provided at the March 24, June 11, and July 24, 1998 workshops, staff has proposed several amendments to section 2257, title 13, California Code of Regulations, to preclude the use of outdated Gasoline Additive Certifications, to cap the current vehicle fleet combustion chamber deposit levels, to update the certification performance standards, and to add clarity and specificity to the regulation.

WHEREAS, the California Environmental Quality Act and Board regulations require that no project that may have significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts;

WHEREAS, public hearings and other administrative proceedings have been held in accordance with provisions of chapter 3.5 (commencing with section 11340), part 1, Division 3, Title 2 of the Government Code;

WHEREAS, the Board has considered the effect of the proposed amendments on the economy of the State;

WHEREAS, the Board finds that:

The reduced vehicle combustion chamber deposit level, due to the introduction of California Reformulated Gasoline (CaRFG) and improved deposit control additive technology, has resulted in at least a five percent reduction in oxides of nitrogen (NO_x) emissions from the California vehicle fleet (about 50 tons per day) relative to the combustion chamber deposit level caused by pre-CaRFG;

Eliminating outdated gasoline additive certifications will preclude the use of old technology deposit control additive formulations at dose rates which can increase vehicle combustion chamber deposit formation;

Lowering the intake valve deposit (IVD) certification performance standard to a maximum average of 50 mg/valve and eliminating the port fuel injector deposit (PFID) clean-up requirement will update the regulatory requirements to reflect improved additives and milder base gasoline properties;

Adoption of a new performance standard for combustion chamber deposits will cap the existing combustion chamber deposit level in the California vehicle fleet;

It is appropriate to revise the current referenced IVD keep-clean test method with ASTM D 5500-98 and the PFID keep-clean test method with ASTM D 5598-95a, to provide technical corrections to the procedures and to provide greater accuracy;

Adoption of the ARB's Vehicle Test Procedure for Evaluating Intake Valve Deposits and Combustion Chamber Deposits will provide an industry accepted test method for combustion chamber deposit measurement and provide consistency with the proposed updated IVD keep-clean test method; and

The other clarifying amendments to section 2257, title 13, California Code of Regulations, will provide more clarity and specificity to certification test fuel requirements;

WHEREAS, the Board further finds that:

The approved amendments do not affect the current emissions reductions associated with the regulation;

The amendments will not result in any adverse environmental impact;

All previously approved Gasoline Additive Certifications originally approved prior to July 1, 1996, will no longer continue to be effective after the amendments are implemented; and

All previously approved Gasoline Additive Certifications originally approved between July 1, 1996, and 30 days after the effective date of the approved amendments will continue to be effective if they demonstrate less than an average maximum 50 mg/valve, when tested in accordance with the referenced intake valve deposit test method;

NOW THEREFORE BE IT RESOLVED that the Board hereby approves amendments to title 13, California Code of Regulations, section 2257, and the incorporated test procedures, as set forth in Attachment A hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to adopt the regulations with modifications as set forth in Attachment A, after making the regulations as modified available to the public for a period of 15 days, provided that the Executive Officer shall consider such written comments regarding the modifications as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted.

BE IT FURTHER RESOLVED that following approval by the Office of Administrative Law of the amendments adopted under this resolution, the Executive Officer is directed, as appropriate, to adopt the amendments as part of the California State Implementation Plan and submit them to the U.S. Environmental Protection Agency as a revision to the California State Implementation Plan.

BE IT FURTHER RESOLVED that the Board directs staff to monitor industry research on combustion chamber deposits, and alternatives to the proposed standards and test methods, and to propose additional modifications to section 2257 if warranted.

I hereby certify that the above is a true and correct copy of Resolution 98-46, as adopted by the Air Resources Board.

Pat Hutchens, Clerk of the Board

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Identification of Attachments to the Resolution

Attachment A: Staff's proposed modifications to the original proposed regulation order.